## **Abstract**

One aspect of the present invention relates to polypharmacophoric compounds. In certain embodiments, the polyphamacophore compounds comprise individual pharmacophore units selected from the group consisting of D-1 agonists, D-2 agonists, D-3 agonists, D-4 agonists, irreversible monoamine inhibitors, reversible monoamine inhibitors, monoamine transporter inhibitors, COMT inhibitors, MAO inhibitors, and dopamine transporter inhibitors. Moreover, the present invention also relates to combinatorial libraries of polypharmacophoric compounds. Another aspect of the present invention relates to the use of a polypharmacophoric compound in a method of treating a mammal in need thereof. For example, a polypharmacophoric compound of the present invention may be used in a method of treating a mammal afflicted with Alzheimer's Disease, Huntington's Disease, depression, attention deficit disorder, autism, obesity, or inflammation.